UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,426	05/18/2001	Chi-Thanh Dang	109445	3709

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OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER
SMITH, PETER J

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/859,426	DANG ET AL.
	Examiner	Art Unit	
	Peter J Smith	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>20 October 2004</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-21</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-21</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some *   c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: amendment filed on 10/20/2004.

2.   Claims 1-21 are pending in the case. Claims 1, 6, 11, 16, and 21 are independent claims.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

4.   Claim 21 is rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter. Claim 21 is directed towards a "carrier wave" which is non-

statutory because it does not fit into any of the three statutory product classes because it is non-

physical. See MPEP §2106:

> For the purposes of a 35 U.S.C. 101 analysis, it is of little relevance whether the claim is directed to a machine or
> a process. The legal principles are the same. AT &T Corp. v. Excel Communications, Inc., 172 F.3d 1352, 1357,
> 50 USPQ2d 1447, 1451 (Fed. Cir. 1999).
> (a) Statutory Product Claims
> Products may be either machines, manufactures, or compositions of matter.
>
> A *machine* is "a concrete thing, consisting of parts or of certain devices and combinations of devices." Burr v.
> Duryee, 68 U.S. (1 Wall.) 531, 570 (1863).
>
> A *manufacture* is "the production of articles for use from raw or prepared materials by
> giving to these materials new forms, qualities, properties or combinations, whether by hand labor or by
> machinery." Chakrabarty, 447 U.S. at 308, 206 USPQ at 196-97 (quoting American Fruit Growers, Inc. v.
> Brogdex Co., 283 U.S. 1, 11 (1931)).
>
> A *composition of matter* is "a composition of two or more substances [or] . . . a[] composite article, whether [it]
> be the result[] of chemical union, or of mechanical mixture, or whether . . . [it] be [a] gas[], fluid[], powder[], or
> solid[]." Id. at 308, 206 USPQ at 197 (quoting Shell Development Co. v. Watson, 149 F. Supp. 279, 280, 113
> SPQ 265, 266 (D.D.C. 1957), aff 'd per curiam, 252 F.2d 861, 116 USPQ 428 (D.C. Cir. 1958)).
>
> If a claim defines a useful machine or manufacture by identifying the physical structure of the machine or
> manufacture in terms of its hardware or hardware and software combination, it defines a statutory product. See,
> e.g., Lowry, 32 F.3d at 1583, 32 USPQ2d at 1034-35; Warmerdam, 33 F.3d at 1361-62, 31 USPQ2d at 1760.
> Office personnel must treat each claim as a whole. The mere fact that a hardware element is recited in a claim

does not necessarily limit the claim to a specific machine or manufacture. Cf. In re Iwahashi, 888 F.2d 1370, 1374-75, 12 USPQ2d 1908, 1911-12 (Fed. Cir. 1989), cited with approval in Alappat, 33 F.3d at 1544 n.24, 31 USPQ2d at 1558 n.24.

A claim limited to a machine or manufacture, which has a practical application in the technological arts, is statutory. In most cases, a claim to a specific machine or manufacture will have a practical application in the technological arts. See Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557 ("the claimed invention as a whole is directed to a combination of interrelated elements which combine to form a machine for converting discrete waveform data samples into anti-aliased pixel illumination intensity data to be displayed on a display means. This is not a disembodied mathematical concept which may be characterized as an abstract idea,' but rather a specific machine to produce a useful, concrete, and tangible result."); and State Street, 149 F.3d at 1373, 47 USPQ2d at 1601 ("the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces a useful, concrete and tangible result' – a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades."). Also see AT &T, 172 F.3d at 1358, 50 USPQ2d at 1452 (Claims drawn to a long-distance telephone billing process containing mathematical algorithms were held patentable subject matter because the process used the algorithm to produce a useful, concrete, tangible result without preempting other uses of the mathematical principle.).

The three statutory product classes have traditionally required physical structure or matter. The claimed carrier wave has no physical structure, does not itself perform any useful, concrete and tangible result and, thus, does not fit within the definition of a machine. The claimed carrier wave is not matter, but a form of energy, and therefore is not a composition of matter. A manufacture can be an article produced from raw or prepared materials by manipulating the raw or prepared materials. A manufacture is also defined as the residual class of product. That the other two product classes, machine and composition of matter, require physical matter is evidence that a manufacture was also intended to require physical matter. Thus, the Examiner concludes that the claimed carrier wave is not one of the three statutory product classes.

5.   Additionally, independent claim 21 is directed towards a "control program usable for managing dynamic translation to a device for executing the control program" to perform instructions. As presently drafted, the claim reads on a computer program per se, which does not

constitute statutory subject matter as prescribed under 35 USC §101. Applicant could easily

render the claimed invention statutory by amending the preamble to recite "A control program

stored on a computer readable medium". The language in the preamble "A carrier wave

encoded" with the control program does not render the claim statutory because a carrier wave is

not a computer readable medium.

The language in the preamble, "usable for managing dynamic translation to a device for

executing the control program" does not render the claimed invention statutory because it in

effect constitutes intended use. See MPEP §2106:

> The subject matter of a properly construed claim is defined by the terms that limit its scope. It is this
> subject matter that must be examined. As a general matter, the grammar and intended meaning of terms
> used in a claim will dictate whether the language limits the claim scope. Language that suggests or
> makes optional but does not require steps to be performed or does not limit a claim to a particular
> structure does not limit the scope of a claim or claim limitation. The following are examples of
> language that may raise a question as to the limiting effect of the language in a claim:
> (A)   statements of intended use or field of use,

Therefore, the intended use language does not limit the claim, and cannot be given patentable

weight or a cause for the preamble to be statutory. For these two reasons set forth in this and the

preceding paragraph 4, independent claim 21 is found by the Examiner to be non-statutory under

35 U.S.C. 101.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   **Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tso et**

al. (hereinafter "Tso"), US 6,421,733 B1 filed 9/8/1997 in view of Hind et al. (hereinafter

"Hind"), US 6,463,440 B1 filed 4/8/1999.

     Regarding independent claim 1, Tso teaches an identity storage that stores identity

information including content elements and transformation information associated with a client

and user in col. 6 line 64 – col. 8 line 9. The characteristics and preferences of users, content

providers and servers are all stored in identity storages which are accessed by the transcoding

server to perform dynamic customizations on requested content. Tso teaches a client and user

determining circuit that determines a sending client and a user of a received request for

information from a information provider in fig. 3, 5, 7-9, col. 2 lines 9-18, and col. 2 line 44 –

col. 3 line 6. Tso teaches an input/output circuit that requests and receives the information from

the information provider in fig. 3, 5, 7-9, col. 2 lines 9-18, and col. 2 line 44 – col. 3 line 6. Tso

teaches a merging circuit that determines the merged content portion based on the received

information and at least one an identity, at least one identity associated with one of the

determined client and the user in fig. 3, 5, 9, col. 2 lines 44-55, col. 6 line 64 – col. 8 line 9, and

col. 14 lines 47-55.

     Tso does not teach that the identity storage stores identity information including style

sheet information which is used to render the merged content portion according to the style sheet

information. Hind does teach an identity storage which stores identity information including

style sheet information which is used to render a merged content portion according to the style

sheet information in col. 4 lines 48-56 and col. 9 lines 4-48. Hind dynamically selects and

applies the correct style sheet to transform and render an appropriate output document. The style

sheet may be selected based on matching characteristics with the source document, or matching

characteristics with user preferences or client device capabilities. It would have been obvious to

one of ordinary skill in the art at the time the invention was made to have combined Hind into

Tso to have created the claimed invention. It would have been obvious and desirable to have

stored and used the style sheets as taught by Hind so that a style sheet developer could have

programmed the transformation rules into the style sheets for each type of user preference and

client device as taught by Hind in col. 9 lines 4-48.

Regarding dependent claim 2, Tso teaches wherein the identity storage comprises

identity content element storage and identity presentation information storage in col. 6 line 64 –

col. 8 line 9. The characteristics and preferences of users, content providers and servers are all

stored in identity storages which are accessed by the transcoding server to perform dynamic

customizations on requested content.

Regarding dependent claim 3, Tso teaches wherein the client and user determining

circuit determines at least one of a client identification and a user identification based on at least

one of internet protocol address information, session identifier information, name pairs and value

pairs in col. 6 line 64 – col. 8 line 9.

Regarding dependent claim 4, Tso teaches wherein the merged content portions are

stored using at least one of an electronic medium, a printed medium, and a paper medium in fig.

3, 5, 9, col. 2 lines 44-55, col. 6 line 64 – col. 8 line 9, and col. 14 lines 47-55. The merged

content portions of Tso are stored as a web page, which can also be printed out by the client.

Regarding dependent claim 5, Tso teaches wherein the merged content portions are at

least one of an electronic text, a printed text, an audio book and a video book in fig. 3, 5, 9, col. 2

lines 44-55, col. 6 line 64 – col. 8 line 9, and col. 14 lines 47-55. The merged content portions of

Tso are stored as a web page, which can also be printed out by the client.

Regarding independent claim 6, Tso teaches receiving a information request from at

least one of a client and a user in fig. 3, 5, 7-9, col. 2 lines 9-18, and col. 2 line 44 – col. 3 line 6.

Tso teaches determining at least one of a client and a user associated with the information

request in fig. 3, 5, 7-9, col. 2 lines 9-18, and col. 2 line 44 – col. 3 line 6. Tso teaches receiving

the requested information from the information provider in fig. 3, 5, 7-9, col. 2 lines 9-18, and

col. 2 line 44 – col. 3 line 6. Tso teaches determining identity information from the stored

identity information that includes content elements and transformation information based on the

at least one of the client and user information in col. 6 line 64 – col. 8 line 9. Tso teaches

determining a merged content portion based on the information and the determined identity

information and then outputting the merged content portion according to the content elements

and the transformation information in fig. 3, 5, 9, col. 2 lines 44-55, col. 6 line 64 – col. 8 line 9,

and col. 14 lines 47-55.

Tso does not teach that the identity storage stores identity information including style

sheet information which is used to render the merged content portion according to the style sheet

information. Hind does teach an identity storage which stores identity information including

style sheet information which is used to render a merged content portion according to the style

sheet information in col. 4 lines 48-56 and col. 9 lines 4-48. Hind dynamically selects and

applies the correct style sheet to transform and render an appropriate output document. The style

sheet may be selected based on matching characteristics with the source document, or matching

characteristics with user preferences or client device capabilities. It would have been obvious to

one of ordinary skill in the art at the time the invention was made to have combined Hind into

Tso to have created the claimed invention. It would have been obvious and desirable to have

stored and used the style sheets as taught by Hind so that a style sheet developer could have

programmed the transformation rules into the style sheets for each type of user preference and

client device as taught by Hind in col. 9 lines 4-48.

Regarding dependent claim 7, Tso teaches wherein the stored identity information

comprises at least one of identity content element information and identity presentation

information in col. 6 line 64 – col. 8 line 9. The characteristics and preferences of users, content

providers and servers are all stored in identity storages which are accessed by the transcoding

server to perform dynamic customizations on requested content.

Regarding dependent claim 8, Tso teaches wherein the client and user information is

determined based on at least one of internet protocol address information, session identifier

information, name pairs and value pairs in col. 6 line 64 – col. 8 line 9.

Regarding dependent claim 9, Tso teaches wherein determining the merged content

portions produces at least one of an interactive text, a printed text, an audio book and a video

book in fig. 3, 5, 9, col. 2 lines 44-55, col. 6 line 64 – col. 8 line 9, and col. 14 lines 47-55. The

merged content portions of Tso are stored as a web page, which can also be printed out by the

client.

Regarding dependent claim 10, Tso teaches wherein the merged content portions are

stored on at least one of electronic media, printed media, and a paper media in fig. 3, 5, 9, col. 2

lines 44-55, col. 6 line 64 – col. 8 line 9, and col. 14 lines 47-55. The merged content portions of

Tso are stored as a web page, which can also be printed out by the client.

Regarding independent claim 11, Tso teaches receiving a information request from at least one of a client and a user in fig. 3, 5, 7-9, col. 2 lines 9-18, and col. 2 line 44 – col. 3 line 6. Tso teaches determining at least one of a client and a user associated with the information request in fig. 3, 5, 7-9, col. 2 lines 9-18, and col. 2 line 44 – col. 3 line 6. Tso teaches receiving the requested information from the information provider in fig. 3, 5, 7-9, col. 2 lines 9-18, and col. 2 line 44 – col. 3 line 6. Tso teaches determining identity information from the stored identity information that includes content elements and transformation information based on the at least one of the client and user information in col. 6 line 64 – col. 8 line 9. Tso teaches determining a merged content portion based on the information and the determined identity information and then outputting the merged content portion according to the content elements and the transformation information in fig. 3, 5, 9, col. 2 lines 44-55, col. 6 line 64 – col. 8 line 9, and col. 14 lines 47-55.

Tso does not teach that the identity storage stores identity information including style sheet information which is used to render the merged content portion according to the style sheet information. Hind does teach an identity storage which stores identity information including style sheet information which is used to render a merged content portion according to the style sheet information in col. 4 lines 48-56 and col. 9 lines 4-48. Hind dynamically selects and applies the correct style sheet to transform and render an appropriate output document. The style sheet may be selected based on matching characteristics with the source document, or matching characteristics with user preferences or client device capabilities. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Hind into Tso to have created the claimed invention. It would have been obvious and desirable to have

stored and used the style sheets as taught by Hind so that a style sheet developer could have

programmed the transformation rules into the style sheets for each type of user preference and

client device as taught by Hind in col. 9 lines 4-48.

Regarding dependent claim 12, Tso teaches wherein the stored identity information

comprises at least one of identity content element information and identity presentation

information in col. 6 line 64 – col. 8 line 9. The characteristics and preferences of users, content

providers and servers are all stored in identity storages which are accessed by the transcoding

server to perform dynamic customizations on requested content.

Regarding dependent claim 13, Tso teaches wherein the client and user is determined

based on at least one of internet protocol address information, session identifier information,

name pairs and value pairs in col. 6 line 64 – col. 8 line 9.

Regarding dependent claim 14, Tso teaches wherein determining the merged content

portions produces at least one of an interactive text, a printed text, an audio book and a video

book in fig. 3, 5, 9, col. 2 lines 44-55, col. 6 line 64 – col. 8 line 9, and col. 14 lines 47-55. The

merged content portions of Tso are stored as a web page, which can also be printed out by the

client.

Regarding dependent claim 15, Tso teaches wherein the merged content portions are

stored on at least one of electronic media, printed media, and a paper media in fig. 3, 5, 9, col. 2

lines 44-55, col. 6 line 64 – col. 8 line 9, and col. 14 lines 47-55. The merged content portions of

Tso are stored as a web page, which can also be printed out by the client.

Regarding independent claim 16, Tso teaches an identity storage that stores identity

information including content elements and transformation information associated with a client

and user in col. 6 line 64 – col. 8 line 9. The characteristics and preferences of users, content

providers and servers are all stored in identity storages which are accessed by the transcoding

server to perform dynamic customizations on requested content. Tso teaches a client and user

determining circuit that determines a sending client and a user of a received request for

information from a information provider in fig. 3, 5, 7-9, col. 2 lines 9-18, and col. 2 line 44 –

col. 3 line 6. Tso teaches an input/output circuit that requests and receives the information from

the information provider in fig. 3, 5, 7-9, col. 2 lines 9-18, and col. 2 line 44 – col. 3 line 6. Tso

teaches a merging circuit that determines the merged content portion based on the received

information and at least one an identity, at least one identity associated with one of the

determined client and the user in fig. 3, 5, 9, col. 2 lines 44-55, col. 6 line 64 – col. 8 line 9, and

col. 14 lines 47-55.

Tso does not teach that the identity storage stores identity information including style

sheet information which is used to render the merged content portion according to the style sheet

information. Hind does teach an identity storage which stores identity information including

style sheet information which is used to render a merged content portion according to the style

sheet information in col. 4 lines 48-56 and col. 9 lines 4-48. Hind dynamically selects and

applies the correct style sheet to transform and render an appropriate output document. The style

sheet may be selected based on matching characteristics with the source document, or matching

characteristics with user preferences or client device capabilities. It would have been obvious to

one of ordinary skill in the art at the time the invention was made to have combined Hind into

Tso to have created the claimed invention. It would have been obvious and desirable to have

stored and used the style sheets as taught by Hind so that a style sheet developer could have

programmed the transformation rules into the style sheets for each type of user preference and

client device as taught by Hind in col. 9 lines 4-48.

Regarding dependent claim 17, Tso teaches wherein the identity storage comprises

identity content element storage and identity presentation information storage in col. 6 line 64 –

col. 8 line 9. The characteristics and preferences of users, content providers and servers are all

stored in identity storages which are accessed by the transcoding server to perform dynamic

customizations on requested content.

Regarding dependent claim 18, Tso teaches wherein the client and user determining

circuit determines at least one of a client identification and a user identification based on at least

one of internet protocol address information, session identifier information, name pairs and value

pairs in col. 6 line 64 – col. 8 line 9.

Regarding dependent claim 19, Tso teaches wherein the merged content portions are

stored on at least one of an electronic media, a printed media, and a paper media in fig. 3, 5, 9,

col. 2 lines 44-55, col. 6 line 64 – col. 8 line 9, and col. 14 lines 47-55. The merged content

portions of Tso are stored as a web page, which can also be printed out by the client.

Regarding dependent claim 20, Tso teaches wherein the merged content portions are at

least one of an interactive electronic text, a printed text, an audio book and a video book in fig. 3,

5, 9, col. 2 lines 44-55, col. 6 line 64 – col. 8 line 9, and col. 14 lines 47-55. The merged content

portions of Tso are stored as a web page, which can also be printed out by the client.

Regarding independent claim 21, Tso teaches receiving a information request from at

least one of a client and a user in fig. 3, 5, 7-9, col. 2 lines 9-18, and col. 2 line 44 – col. 3 line 6.

Tso teaches determining at least one of a client and a user associated with the information

request in fig. 3, 5, 7-9, col. 2 lines 9-18, and col. 2 line 44 – col. 3 line 6. Tso teaches receiving

the requested information from the information provider in fig. 3, 5, 7-9, col. 2 lines 9-18, and

col. 2 line 44 – col. 3 line 6. Tso teaches determining identity information from the stored

identity information that includes content elements and transformation information based on the

at least one of the client and user information in col. 6 line 64 – col. 8 line 9. Tso teaches

determining a merged content portion based on the information and the determined identity

information and then outputting the merged content portion according to the content elements

and the transformation information in fig. 3, 5, 9, col. 2 lines 44-55, col. 6 line 64 – col. 8 line 9,

and col. 14 lines 47-55.

Tso does not teach that the identity storage stores identity information including style

sheet information which is used to render the merged content portion according to the style sheet

information. Hind does teach an identity storage which stores identity information including

style sheet information which is used to render a merged content portion according to the style

sheet information in col. 4 lines 48-56 and col. 9 lines 4-48. Hind dynamically selects and

applies the correct style sheet to transform and render an appropriate output document. The style

sheet may be selected based on matching characteristics with the source document, or matching

characteristics with user preferences or client device capabilities. It would have been obvious to

one of ordinary skill in the art at the time the invention was made to have combined Hind into

Tso to have created the claimed invention. It would have been obvious and desirable to have

stored and used the style sheets as taught by Hind so that a style sheet developer could have

programmed the transformation rules into the style sheets for each type of user preference and

client device as taught by Hind in col. 9 lines 4-48.

Response to Arguments

8.   Applicant's arguments filed 10/20/2004 have been fully considered but they are not

persuasive. Regarding Applicant's argument in page 8 that Claim 21 satisfies 35 U.S.C. 101, the

Examiner respectfully disagrees. The carrier wave of Claim 21 is not embodied on hardware and

thus is not a statutory computer readable medium.

9.   Applicant's arguments with respect to claims 1-21 have been considered but are moot in

view of the new ground(s) of rejection. The Examiner has searched and found the prior art of

Hind et al. (hereinafter "Hind") which teaches the amended limitation not specifically disclosed

in Tso et al. (hereinafter "Tso"). The teachings of Hind are related to that of Tso and the

Examiner believes it would have been obvious to one of ordinary skill in the art at the time of the

invention to have combined the teachings to have rendered the claimed invention obvious.

Conclusion

10.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

        A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Smith whose telephone number is 571-272-4101. The examiner can normally be reached on Mondays-Fridays 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PJS
1/26/2005

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER